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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,692	12/20/2000	Kouji Nakahara	520.39419X00	3284

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ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-9889

EXAMINER

NGUYEN, JOSEPH H

ART UNIT	PAPER NUMBER
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2815

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/739,692

Applicant(s)

NAKAHARA ET AL.

Examiner

Joseph Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 33-34 as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Kitajima et al.

Regarding claim 33, Kitajima et al discloses on figure 1 a semiconductor laser module comprising a semiconductor laser 2; a driving circuit 20 for driving said semiconductor laser; and a temperature control means for controlling the temperature of the semiconductor laser; wherein said temperature control means includes a heating element 5 without a cooling element for controlling temperature of said semiconductor laser, and a temperature sensor 4 for sensing ambient air temperature of said semiconductor laser, and a temperature module 40 for controlling said heating element on the basis of temperature information from said temperature sensor so as to maintain said semiconductor laser at a temperature which is higher than ambient air temperature of said semiconductor laser.

Regarding claim 34, Kitajima et al discloses on figure 1 said temperature control module 40 controls said heating element to maintain said semiconductor laser at a temperature higher than the ambient air temperature of said semiconductor laser.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-37, 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitajima et al as applied to claim 33 above, and further in view of Palanisamy et al.

Regarding claim 35, Kitajima et al discloses on figure 1 substantially all the structure set forth in the claimed invention except said semiconductor laser mounted on said heating element through an insulating film and a laminated thin film provided for joining said semiconductor laser to said insulating film. However, Palanisamy et al discloses on figure 2 said semiconductor laser 204 mounted on said heating element 212 through an insulating film 211 and a laminated thin film provided for joining said semiconductor laser to said insulating film. In view of such teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitajima et al by having said semiconductor laser mounted on said heating element through an insulating film and a laminated thin film provided for joining said semiconductor laser to said insulating film for the purpose of effectively hermetically sealing a semiconductor laser module.

Regarding claims 36-37, 39-42, Kitajima et al and Palanisamy et al together disclose all the structures set forth in the claimed invention.

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitajima et al as applied to claim 33 above, and further in view of Auracher et al.

Regarding claim 38, Kitajima et al discloses on figure1 substantially all the structure set forth in the claimed invention except said semiconductor laser being a Farby-Perot type laser. However, Auracher discloses said semiconductor laser being a Fabry-Perot (col. 2, lines 15-20). In view of such teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kitajima et al by having said semiconductor laser being a Fabry-Perot for the purpose of optimizing the use of a semiconductor laser module.

Response to Arguments

Applicant's arguments filed on 01/16/2004 have been fully considered but they are not persuasive.

With respect to claim 1, applicant argues that Kitajima et al (JP 3-48477) does not disclose a heating element without a cooling element as recited in now amended claim 1. However, the limitation "without a cooling element" does not structurally distinguish over Kitajima because element 5 of Kitajima can be labeled a "heating element" as it performs a heating function. Functional language also does not structurally distinguish the claimed invention over Kitajima. Further, the claim language "to maintain said semiconductor laser at a temperature which is higher than ambient air temperature of said semiconductor laser" is merely functional language. Since the

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semiconductor laser module of Kitajima functions to keep laser 1 and laser 2 at the same temperature (which can be higher than the ambient air temperature), the functional language of the claim does not structurally distinguish over the applied prior art.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Nguyen whose telephone number is (571) 272-1734. The examiner can normally be reached on Monday-Friday, 7:30 am- 4:30 pm

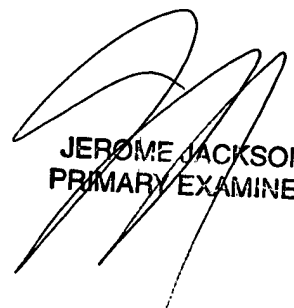
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (571) 272-1664. The fax phone number for

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the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JN
June 30, 2004



**JEROME JACKSON
PRIMARY EXAMINER**